WHAT IS CLAIMED IS:

1. A method of providing an indication of static temperature for an object in an airflow wherein a relative velocity of the object to the air mass changes, comprising providing a probe subjected to the airflow and providing an airflow channel in the probe, heating the air flowing through the channel, providing a temperature sensing element positioned in the airflow channel to measure temperature of air flowing through the airflow channel and maintaining the temperature measured by the temperature sensing element at a substantially known offset above the static temperature of the airflow.

2. The method of claim 1 further including the step of adjusting at least one of the functions of heating the airflow through the channel and controlling the velocity of air flowing through the channel to cause the temperature sensed by the temperature sensing element to change with airflow velocity inversely with a change of total temperature caused by the relative velocity of the airflow and the object.

3. The method of claim 1 further subtracting the known offset from the temperature sensed by the sensing element to obtain the static temperature of the airflow.

4. The method of claim 2 wherein the at least one function comprises adjusting the heating of the airflow as a further function of altitude.

5. The method of claim 2 including determining altitude of the object and adjusting the heating function to correct for altitude changes.

6. The method of claim 1 further comprising providing a probe and a second flow channel open to the airflow channel and extending laterally therefrom, the temperature sensing element being in the second flow channel, and adjusting the airflow through the second flow channel in relation to the relative velocity to obtain the known offset.

7. The method of claim 1 including adjusting the heater to control heating of the air flowing through the airflow channel to obtain the known offset.

8. An air temperature sensing housing having a strut projecting into air, the air having a velocity relative to the housing, the housing having a passageway carrying an airflow through the housing, a heater for heating at least a portion of the housing, and a temperature sensing element mounted in the passageway in a location such that as the airflow across the temperature sensing element decreases, the effect of the heater on the temperature measured by

the temperature sensing element increases at a predetermined relationship.

9. The air temperature sensing housing of claim 6, further characterized by the housing having an upstream facing flow channel, the passageway opening to the flow channel, the airflow in the passageway comprising a portion of a primary airflow entering the flow channel.

10. The air temperature sensing housing of claim 8, wherein the heater is positioned on the at least a portion of the housing and is constructed to bias the temperature sensed by the temperature sensing element to indicate a temperature higher than the total temperature of the airflow.

11. The air temperature sensing housing of claim 10 wherein there is a controller connected to control the heater to provide a heat output to bias the temperature sensed by the temperature sensing element, the controller adjusting the heat output in response to changes in altitude of the housing.

12. An air temperature sensor for measuring air temperature comprising a housing having a strut projecting from an aircraft into air having a relative velocity with respect to the housing, the housing having a main flow channel carrying an

airflow from an inlet to an outlet, a branch passageway open to the main flow channel and configured to carry a portion of the airflow at the inlet to the main flow channel through the housing, a heater for heating at least a portion of the strut and housing to raise the temperature of air in the branch passageway, and a temperature sensing element mounted in the branch passageway in a location such that as airflow velocity in the branch passageway decreases, the heating of air in the branch passageway by the heater increases at a known relationship.

13. The air temperature sensor of claim 12 wherein the known relationship comprises a known offset from static temperature of the air.

14. The air temperature sensor of claim 12 further comprising a controller coupled to control heat output of the heater, the controller controlling the heat output at least partially in response to changes in one of the parameters of relative velocity between the sensor and the air and the altitude of the sensor.